Planning and Zoning for Concentrated Animal Feeding Operations - Summary
Planning Advisory Service Report Number 482, Chapters 1, 2, 4, and 5

Key Planning Issues

Odors
- Waste odor composition & transportation characteristics vary by animal type and weather conditions
- Storage methods do make a difference (worst-best: lagoons, steel tanks, underground containment)
- Spreading methods do make a difference (worst-best: spraying, injection (risk of hill erosion)) (timing)

Air Pollution
- Ammonia (deposited up to two miles away, acid rain, excess NH3 fertilization & soil leaching)
- Hydrogen sulfide (rotten egg smell, deadly or debilitating in sufficient concentration)

Water Pollution
- Commonly an issue before CAFOs arrive due to fertilizer loadings on cropland
- Point source in *catastrophically* dense concentrations and accidents do happen (tourism ↓)

Employment and Displacement
- If not a growth industry (e.g. computers) there are inevitably more losers than winners
  - Losers likely smaller producers
- Room for doubt about *net* gain (who benefits?)
- Room for doubt about both wage levels and job quality (e.g. immigrant workers, occupational health)

Financial Responsibility
- Risk that owner simply walks away from environmental liabilities that exceed property sale gains
- Very real possibility of seeing CAFOs become rural "brownfields", *taxpayers on the hook*
  - Too high a price to pay for whatever economic development CAFOs may bring
- Having to go great lengths to hold the operator accountable
- Contractual loop holes shifting responsibility to the "growers" (less deep pockets, bankruptcy)

Political & Social Issues

Social
- Family farm activists, communities, & environmentalists feel sacrificed for something
  - They believe is environmentally irresponsible
  - They believe *fundamentally alters the character of rural life*. (trappings of industrial life)
- Bitter sense of disenfranchisement and anxiety about efficacy of the democratic process
- CAFOs are Big Water Consumers (water fights if water table drops)

Political
- Irony
  - *Old* zoning enabling legislation exempts agriculture from county zoning regulation
    - Designed not for CAFOs, but to make life easier for family farmers
    - Livestock industry organizations lobby to retain exemptions
  - Right-To-Farm laws sought to shield farmers from nuisance lawsuits
    - So long as farmers were not negligent or violating environmental law
    - So long as farmers adhered to normal, conventional practices
    - *Constitutionality* of Right-To-Farm now in question in case law (takings)
- State Officials, relationships in behavior
  - [↑ latch on idea of maintaining state's market share; ↑ write looser regulation]
  - [↑ perceive CAFOs as inevitable trend; ↑ lax CAFO regulations & enforcement]
  - [↑ wanting to attract to somehow benefit rural economy; ↓ questioning value]
- Corporate farming restrictions laws prohibiting corporate ownership of farmland
- Risks of Relying on State Regulation (gaps, enforcement shortage, never see the actual site)

Comprehensive Plan

Communities must decide *what* they want before they can decide *why* they oppose something
Preservation of their rural character and natural resources, and how to sustain them economically
Need for consensus on Operation Definitions (such as for terms like "rural character")
Trending concept of "Sustainable Agriculture"
Ban "factory farms" VS. Site CAFOS without local public scrutiny—both must yield ground
The solution may lie in seeking changes in the statutory authority at the state level

Zoning (authority only over future)

Simple enough to enforce but strict enough to be effective (requires realism/extended commitment)
Strategies
- Districts
  - Multitier (gradation) approach to agricultural zoning
    - Achieve greater separation of residential from heavy agricultural uses
    - Identifies areas most suitable for and least sensitive to intensive agriculture
    - Allows for some distribution of feedlot uses(don't require to haul waste far)
    - Formulated with a review of current nutrient management plan practices
    - CAFOs not given an exclusive district
- Separation Standards
  - Incompatible uses due to odor and water pollution
  - Reasonable diminution of odor plumes under most conducive dispersal downwind
  - ↑ separation requirements; ↑ herd size—is a reasonable regulatory response
  - Incentive for reduction (qualified agricultural engineer approved means for odor ↓)
  - Single setback distance (e.g. 500 ft) for spraying of animal waste on sensitive uses
  - Minimum setbacks &or filter strip plantings for surface water, flood plain, & ditches
  - Apply setback requirements in reverse to new residential/other development
- Conditional Use
  - Not recommended to list CAFOs as conditional use
    - temptation to delay establishing clear conditions in the ordinance
    - fewer surprises, less controversy, and more certainty in the process
  - Condition permits on the use of best available technologies
    - And will comply with expectations
      - state-of-the-art design, placement, & spacing of lagoons is essential if they to be employed at all (leaks/overflows)
    - Premium on community welfare over the economic viability of feedlots
    - Metropolitan area growth will bring land use "friction"
  - Require Lagoon Closure Requirements
    - Financial assurance mechanisms (e.g. Surety bonds, self-insurance)
    - County Health Director and County Attorney are the responsible officials
- Performance Standards
  - Staff, training, and equipment costs due to monitoring and enforcement
  - Complaint-based feedback is fast for odors; too slow and too late for groundwater
  - Preconstruction review of designs by agricultural engineers
  - Many water pollution setbacks double as performance standards

Health & Environmental Standards (authority over present and future)

So long as rules are reasonably related to the stated public policy goal (e.g. air pollution reduction)
Draft ordinance by planners and staff from other departments to construct comprehensive strategy
- States might preempt county authority & places demands on the technical capacity of staff

Public accessibility of comprehensive nutrient management plans as an environmental regulation